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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,466	03/27/2001	Sean Lee	099866/9	1836

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KRAMER LEVIN NAFTALIS & FRANKEL LLP
INTELLECTUAL PROPERTY DEPARTMENT
919 THIRD AVENUE
NEW YORK, NY 10022

EXAMINER

SHEIKH, HUMERA N

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 05/20/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/818,466

Applicant(s)

LEE ET AL.

Examiner

Humera N. Sheikh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2003 (paper no. 13).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 135-170 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 135-170 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

Receipt is acknowledged of the Information Disclosure Statement (IDS) filed 02/10/03, the request for extension of time (1 month) and the Amendment, both filed 02/14/03.

Claims 135-170 are pending. Claims 1-134 have been cancelled by virtue of the amendment. Claims 135-170 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 135-170 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimono *et al.* (US Pat. No. 5, 290,544).

Shimono teaches cosmetic products comprising soluble glass, that may be heat-derived or sol-gel derived, wherein the cosmetic products are free from or do not contain water (see reference column 1, lines 1-68 through col. 2, lines 1-55); claims and abstract.

The cosmetic products contain soluble glass with metal ions, which provide antibacterial and antimold effects with a high degree of safety (col. 2, lines 27-30). Shimono teaches that the soluble glass may be manufactured by any method, such as heating the glass to be vitrified or alternatively, by a sol-gel method (col. 1, lines 62-68). The cosmetic products are used in the form of a liquid, cream or powder. Liquid formulations comprise liquid foundation, skin lotion, milky lotion, shampoo, hair rinse, etc. Cosmetic formulations comprising solid materials that do not contain water consist of powder foundation, eye shadow, lipstick, body powder, baby powder, etc (col. 2, lines 45-55). The soluble glass may be pulverized into a powder having an average particle size of 20 microns or less, preferably 5 microns or less (col. 2, lines 56-60). The soluble glass comprise silicone dioxide oxide (SiO_2), sodium oxide (Na_2O), calcium oxide (CaO), phosphorous oxide (P_2O_5), talc, silicone treated titanium dioxide, various iron oxides – (red, yellow, black), mica, liquid paraffin, and glycerin (see examples and claims).

The instant invention is drawn to a cosmetic composition comprising bioactive glass and a substantially anhydrous cosmetic formulation, wherein the bioactive glass is melt-derived, sol-gel derived and an aqueous extract. Shimono teaches cosmetic compositions comprising soluble glass, wherein the cosmetics are in solid form and free of water i.e., powder foundation, eye shadow, lipstick, etc, and comprise soluble glass made by heating or sol-gel derived methods wherein the glass has moisture absorbing properties (col. 2, lines 49-55). There is no significant difference observed between the prior art and the instant invention. Furthermore, it would have been obvious to one of ordinary skill in the pharmaceutical art at the time the invention was made to incorporate soluble glass into a cosmetic formulation because it could impart a beneficial role in contributing to the desired objective of achieving effective antibacterial and antimold properties while providing a high degree of safety without skin irritation. The expected result would be a bacteria-free, non-irritating cosmetic product.

Response to Arguments

Applicant's arguments filed 02/14/03 have been fully considered but they are not persuasive.

The applicant argued the 35 U.S.C. 103(a) rejections stating, "Shimono does not disclose, teach or suggest cosmetic compositions containing bioactive glass, or methods of making such compositions, with the *proviso that bioactive glass does not comprise ions of silver, copper or zinc*. In contrast, Shimono discloses and claims

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compositions that contain metal ions, specifically ions of silver, copper and zinc. Moreover, Shimono would teach to the reader that compositions which do not contain these ions or some other known antibacterial agent are not suitable for cosmetic products."

These arguments have been fully considered, but were not found to be persuasive. Shimono teaches cosmetic products comprising soluble glass, wherein the cosmetic products do not contain water. The cosmetic products contain antibacterial agents, and exhibit antibacterial and antimold effects with a high degree of safety with no skin irritation. The burden is shifted to the applicant to show that the incorporation of metal ions (silver, copper, zinc) are detrimental to the cosmetic formulation.

It is the position of the examiner that the prior art would recognize the bioglass of the reference as being suitable. Note in particular that Shimono et al. is directed to cosmetic formulations exhibiting improved moisture absorbing properties as well as being antibacterial. The applicant's specification at page 27 specifically desires non-irritating cosmetic formulations. Furthermore, the applicant's specification at page 35 desires the use of bioactive glass in formulations that absorb moisture.

The prior art clearly teaches at column 2, lines 26-55, soluble glass containing an antibacterial agent, exhibiting an antibacterial effect and antimold effect with moisture absorbing properties and no skin irritation derived from bioactive glass. Hence, it is the examiner's position that there are no unusual and/or unexpected results shown by the exclusion of metal ions.

Finally, it is noted that applicant provides cosmetic ingredients, which do permit those ions, such as the disclosed in the nail polish products at page 50, line 13.

Therefore, the instant invention is rendered obvious and unpatentable over the prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (703) 308-4429. The examiner can normally be reached on Monday through Friday from 7:00A.M. to 4:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

hns
May 19, 2003


THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600